

INTERNATIONAL SEARCH REPORT

International Application No

PC 03/02776

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L41/24 C04B35/491

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L C04B B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 012, no. 320 (E-651), 30 August 1988 (1988-08-30) -& JP 63 084175 A (TOYOTA MOTOR CORP), 14 April 1988 (1988-04-14)	1-9, 11-14
Y	abstract page 360, left-hand column, paragraph 4; figures 1B,2	10
X	EP 0 426 466 A (SAKAI CHEMICAL INDUSTRY CO) 8 May 1991 (1991-05-08)	1-6,8-14
Y	page 2, line 14-23 page 3, line 52 -page 4, line 27 page 6, line 29 -page 7, line 12	10
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

17 February 2004

Date of mailing of the international search report

24/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Meul, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DE 03/02776

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 395 117 B1 (TAKEUCHI YUKIHISA ET AL) 28 May 2002 (2002-05-28) column 2, line 54 -column 3, line 39 column 7, line 37 -column 8, line 37 column 9, line 37-42 column 10, line 52-62	1,2,8,9, 11-14
X	PATENT ABSTRACTS OF JAPAN vol. 006, no. 200 (E-135), 9 October 1982 (1982-10-09) -& JP 57 107086 A (MATSUSHITA ELECTRIC IND CO LTD), 3 July 1982 (1982-07-03) abstract	1,2,8,9, 11-14
X	EP 0 813 254 A (NGK INSULATORS LTD) 17 December 1997 (1997-12-17) figure 4; example 9	1-4, 11-14
X	US 5 089 070 A (MCANDREW THOMAS P) 18 February 1992 (1992-02-18) claims 1-11	1,2,8, 11-14
X	EP 0 736 915 A (SEIKO EPSON CORP) 9 October 1996 (1996-10-09) page 2, line 7-46 claims 6-8	1,2,4-6, 8,9,11, 13,14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 03/02776

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 63084175	A	14-04-1988	NONE
EP 0426466	A	08-05-1991	JP 2518703 B2 31-07-1996 JP 3148186 A 24-06-1991 DE 69022535 D1 26-10-1995 DE 69022535 T2 21-03-1996 EP 0426466 A1 08-05-1991 US 5507898 A 16-04-1996
US 6395117	B1	28-05-2002	US 6051171 A 18-04-2000 DE 69903297 D1 07-11-2002 DE 69903297 T2 11-09-2003 EP 1088802 A1 04-04-2001 JP 2001106579 A 17-04-2001 DE 69516479 D1 31-05-2000 DE 69516479 T2 30-11-2000 EP 0708068 A1 24-04-1996 JP 3274330 B2 15-04-2002 JP 9118568 A 06-05-1997 US 5753160 A 19-05-1998 DE 69814592 D1 18-06-2003 EP 0959056 A1 24-11-1999 JP 11322446 A 24-11-1999
JP 57107086	A	03-07-1982	NONE
EP 0813254	A	17-12-1997	CN 1176499 A , B 18-03-1998 DE 69707359 D1 22-11-2001 DE 69707359 T2 27-06-2002 EP 0813254 A1 17-12-1997 JP 10117024 A 06-05-1998 US 6045642 A 04-04-2000
US 5089070	A	18-02-1992	NONE
EP 0736915	A	09-10-1996	EP 0736915 A1 09-10-1996 JP 3487068 B2 13-01-2004 JP 9223831 A 26-08-1997 US 6140746 A 31-10-2000